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CLAIMS

1. An electric vehicle battery rapid charging connector, comprising:

(a) a connector plug having a body, said body having a first end and an opposite second end;

(b) means for attaching an electrical cable at said first end of said body, said electrical cable including a plurality of electrical conductors therein;

(c) means for providing a plurality of sockets at said second end of said body, at least two of said plurality of sockets adapted for recharging a battery of said electric vehicle; and

(d) means for providing at least one cavity in said body.

2. The electric vehicle battery rapid charging connector of claim 1 wherein said cavity is adapted to receive a module.

3. The electric vehicle battery rapid charging connector of claim 2 wherein said module includes at least one switch, said at least one switch attached to at least one of said plurality of electrical conductors.

4. The electric vehicle battery rapid charging connector of claim 2 wherein said module includes at least one indicator light, said at least one indicator light attached to at least one of said plurality of electrical conductors.

5. The electric vehicle battery rapid charging connector of claim 2 wherein said module includes at least one blank, said at least one blank adapted for covering an opening into said at least one cavity.

6. The electric vehicle battery rapid charging connector of claim 2 wherein said module includes at least one switch, said at least one switch attached to at least one of said plurality of electrical conductors and wherein said module includes at least one indicator light, said at least one indicator light attached to at least one of said plurality of electrical conductors.

7. The electric vehicle battery rapid charging connector of claim 1 wherein said plurality of sockets is adapted to mate electrically with a plurality of pins that are disposed in a receptacle, said receptacle adapted for attachment to said electric vehicle.

8. The electric vehicle battery rapid charging connector of claim 7 wherein at least one of said plurality of pins is longer than at least one other of said plurality of pins and whereby said at least one of said plurality of pins that is longer is adapted to mate electrically with at least one of said plurality of sockets before at least one other of said plurality of pins is adapted to mate electrically with at least one other of said plurality of sockets.

9. The electric vehicle battery rapid charging connector of claim 7 wherein said connector is electrically connected to means for monitoring at least one parameter in said electric vehicle when said connector is electrically connected with said receptacle.

10. The electric vehicle battery rapid charging connector of claim 1 wherein said connector includes means for determining a temperature of said connector.

11. The electric vehicle battery rapid charging connector of claim 10 wherein said means for determining a temperature includes at least one device selected from the group consisting of resistance temperature detector, thermocouple, and temperature sensing switches.

12. The electric vehicle battery rapid charging connector of claim 10 wherein said means for determining a temperature is attached to a first end of said at least one of said plurality of electrical conductors and including means for monitoring said temperature that is attached to a second end of said at least one of said plurality of electrical conductors.

13. The electric vehicle battery rapid charging connector of claim 12 wherein said means for monitoring is adapted to affect a current that is flowing through said conductor

subsequent to said temperature exceeding a predetermined threshold amount.

14. An electric vehicle battery rapid charging connector, comprising:

(a) a connector plug having a body, said body having a first end and an opposite second end;

(b) means for attaching an electrical cable at said first end of said body, said electrical cable including a plurality of electrical conductors therein;

(c) means for providing a plurality of sockets at said second end of said body, at least two of said plurality of sockets adapted for recharging a battery of said electric vehicle; and

(d) means for determining a temperature in said body.

15. The electric vehicle battery rapid charging connector of claim 14 wherein said means for determining a temperature in said body is adapted to supply a signal through said

electrical cable, said signal being representative of said temperature in said body.

16. The electric vehicle battery rapid charging connector of claim 15 including control means that is adapted to receive said signal and wherein a current that is supplied for charging at least one battery in said electric vehicle through said connector is lessened by said control means subsequent to said temperature in said body exceeding a predetermined threshold level.

17. The electric vehicle battery rapid charging connector of claim 16 wherein at least two of said sockets are adapted to carry a maximal flow of current for a predetermined limited amount of time and wherein when said maximal flow of current occurring through at least two of said sockets exceeds said predetermined limited amount of time, said temperature in said body rises and wherein if said maximal flow of current continues for a sufficient amount of time said temperature in said body will exceed said threshold level.

18. The electric vehicle battery rapid charging connector of claim 17 wherein said at least two of said sockets are smaller than would be required to maintain said maximal flow of current through said at least two of said sockets to continue indefinitely.

19. The electric vehicle battery rapid charging connector of claim 15 including control means that is adapted to receive said signal and wherein the flow of a current that is supplied for charging at least one battery in said electric vehicle through said connector is stopped by said control means subsequent to said temperature in said body exceeding a predetermined threshold amount.

20. An electric vehicle battery rapid charging connector, comprising:

(a) a connector plug having a body, said body having a first end and an opposite second end;

(b) means for attaching an electrical cable at said first end of said connector, said electrical cable including a plurality of electrical conductors therein;

(c) means for providing a plurality of pins at said second end of said connector, at least two of said plurality of pins adapted for recharging a battery of said electric vehicle; and

(d) means for providing at least one cavity in said body.